

BERNINA® 1005/1004

Important!

Safety instructions

SEV VDE (Official Testing Authorities in Switzerland and West Germany). The following safety instructions must be observed:

– The moving needle is a source of danger (risk of injury to the fingers). Therefore, always watch your work.

– The sewing machine should be disconnected from the mains by removing the mains plug from the socket when carrying out any operations within the needle movement area, e.g. changing the needle, presser foot, stitch plate, bob or when removing or replacing the lower thread bobbin or foot or when carrying out maintenance (cleaning and lubricating) and whenever work is interrupted or completed.

– Technical repairs should only be carried out by a JETTINGA dealer.

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Details of the machine



- 1 Finger button
- 2 Stitch plate
- 3 Presser foot
- 4 Needle clamp
- 5 Thread regulator
- 6 Thread take-up lever
- 7 Foot tension dial
- 8 Thread holder pin
- 9 Thread guide
- 10 Thread tension adjustment knob
- 11 Foot tension carrying handle
- 12 Stitch selector lever
- 13 Darning switch
- 14 Supplementary thread guide
- 15 Thread holder pin
- 16 Foot tension dial
- 17 Foot tension
- 18 Stitch width knob
- 19 Needle position knob
- 20 Needle position knob
- 21 Stitches per inch (Model 100 only)
- 22 Foot tension dial
- 23 Needle length knob
- 24 Needle plate for sewing table
- 25 Sewing machine control knob





1

Mains cable, Foot control unit, Power switch, Sewing light



Connecting mains cable and foot control unit

- 1 Plug the specially combined mains / foot control cable into the machine. Plug the foot control cable into the foot control and the mains cable into the mains socket.

Foot control unit

This is used to regulate the sewing speed. The sewing speed can be controlled from virtually 0 to the speed desired by varying the pressure on the plate of the foot control unit.

Power switch, sewing light

- 2  Off: The machine is switched off.
 On: The machine is switched on.
 The machine and sewing light are switched on.



2



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3

Accessory box *

Accessory box

- 1 The accessories are neatly stored in the accessory box.

Removing the accessory box

- 2 Simply push back away from the machine.

Fitting the accessory box onto the machine

- 3 The accessory box has two fixing lugs that fit into the base plate of the machine. Lay the box onto the base plate from the rear and press against the free arm until the fixing lugs engage in the holes provided.

* Additional accessory in some countries



1



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3

Winding lower thread

Winding lower thread

- 1 Holding the handwheel with the left hand, turn the handwheel reverse (indicated with the right hand). The sewing machine is now disengaged.

Place empty bobbin on the winder and press it to the right. The bobbin winder is now engaged.

- 2 Take thread from the reel of thread on the thread holder pin and pass it clockwise around the pre-tension stud to the empty bobbin. Wind around the empty bobbin seven times, again in a clockwise direction.

Press the stop control to start the motor. When the bobbin is full, the bobbin winder will stop automatically. Push the bobbin back to the left and remove.

- 3 When removing the bobbin, cut the thread by pulling it to the left against the bobbin winder stop.



Inserting the bobbin, Removing and inserting the bobbin case

Inserting the bobbin

- 1 Hold the bobbin case in the left hand. Insert the bobbin with the thread running in a clockwise direction. See arrow.
- 2 Take the thread anti-clockwise to the slot. Pull the thread into the slot and under the spring, until it lies in the T-shaped slot at the end of the spring.

Removing the bobbin case

- 3 Raise the needle using the handwheel. Open the hinged front cover up the free arm. With the index finger and thumb of the left hand, pull the bobbin case (case) forward and remove the bobbin case.

Inserting the bobbin case

Make sure that the needle is fully raised when inserting or removing the bobbin case. Hold the bobbin case as in Fig. 3 lower so that the finger of the bobbin case points upwards, engaging in the notch of the hook. Close the hinged front cover.



Threading the upper thread

Thread the upper thread

- 1 Check that the needle is in the raised position. Raise the pressure foot. Place the reel of thread on one of the two thread holder pins. Firmly pass the thread into the thread guide on the top of the machine. Then pull it through the connector (A) into the thread tension.
- 2 On the front of the machine, take the thread from the slot (A) downwards under the thread regulator (B), then up to the thread take-up lever (C) and down again to the needle thread guide (D). Always thread the needle from front to back.

Supplementary thread guide on handle

- 3 When sewing with long-stroke needles, metal and alloy threads, double or triple needles, take the thread through the special supplementary thread guide on the handle. This ensures perfect thread feed.



1



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3

Bringing up the lower thread, Thread tension, Feed-dog



Bringing up the lower thread

- 1 Hold the upper thread loosely. Turn the handwheel towards you until the thread take-up lever is fully raised. Pull the upper thread so that the lower thread is brought up through the stitch plate hole. Take both threads through the slot in the presser foot and place to the side.

Thread tension

- 2 Normal tension — red mark (5)
The thread tension should be adjusted for special sewing, e.g. sewing with Cordpencil. For a tighter tension, turn the tension dial to the next larger number and for a looser tension, turn it to the next smaller number.

Lowering the feed dog

- 3 For all normal sewing work, the feed-dog should be raised. It should point to symbol . For certain types of sewing, e.g. patching, sewing on buttons, the table should not be moved and the feed-dog must be lowered. Turn the knob to the symbol .



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Changing needle and presser foot

Changing the needle

- 1 Set the power switch to .

Check that the needle is in the raised position. If not, turn the handwheel. Using the special screwdriver, loosen the needle clamp screw by half a turn (anti-clockwise) and remove the needle.

Insert a NEW needle – flat side to the rear. Push the needle right up and tighten the needle clamp screw securely.

Changing presser foot

Turn the handwheel towards you until needle is fully raised.

- 2 Raise the presser foot.

- 3 Raise the clamping lever with the index finger of the right hand and using the middle finger and thumb, remove the presser foot.

To attach the presser foot, the procedure is the same but press the clamping lever down with the index finger.



Needles / Thread

Needle	75	80	90	100	110-120
Cleaning thread	*	*			
Embroidery thread 80		*			
Mercedised cotton sewing thread		*	*		
Synthetic sewing thread		*	*		
Coarse mercedised cotton Mercedised synthetic			*	*	
Buttonhole thread for top stitching (Concordat)				*	*

Important points to note concerning sewing machine needles

The needle size required depends on the thread selected. The needle must match the thread.

When sewing, the thread lies in the long groove to the front of the needle (Fig. 1). If the needle is too fine, the thread will not fit into the groove (Fig. 2) and skipped stitches will result.

Needle table

Standard needle

130/705 H (Normal point, slightly rounded)

All purpose needle for woven synthetic and natural fibres, fine linen, chiffon, batiste, organdie, wool, velvet, decorative seams and embroidery

Special needles

130/705-SES (Fine Ball point)

Fine knits, also specially suitable for synthetics

130/705 H-SLK (Medium ball point)

Heavier knittens of natural fibre knits

130/705 H-Strich (Medium ball point)

Special needle for delicate or difficult stretch fabrics

130/705 H-J (Extra fine point)

Twill, gabardine, heavy sham, denim, canvas

Punches dense fabrics more easily

130/705 H-LL or **H-LR** (Cutting point)

Leather, suede, corkskin, kid, popskin, imitation leathers and sueded plastics, woven fabrics



Presser feet, Accessories

Presser feet are an important sewing aid.

Successful sewing depends on the correct choice of presser foot.

However, individual presser feet are not just for one particular type of work. They can also be used to simplify other tasks, e.g. Blind stitch foot for edge stitching.

Accessories 1005

Fabric cover
Accessory box *
5 bobbins
Needle assortment
Seam ripper
Darning ring with clip *
Small screwdriver
Special screwdriver
Cleaning brush
Open, closed
Bulb holder

Presser foot No. 0
Overlock foot No. 2
Blind stitch foot No. 5
Buttonhole foot No. 3
Darning foot No. 9 *
Zip foot No. 4 *

Accessories 1004

Fabric cover
Accessory box *
5 bobbins
Needle assortment
Seam ripper *
Darning ring with clip *
Small screwdriver *
Special screwdriver
Cleaning brush
Open, closed
Bulb holder

Presser foot No. 0
Overlock foot No. 2
Blind stitch foot No. 5
Buttonhole foot No. 3
Darning foot No. 9 *

* Additional accessory in some countries



Sewing tips

A few hints:

Set your sewing far enough away from the table edge.
Correct sitting position and correct guiding of the work will make sewing easier.

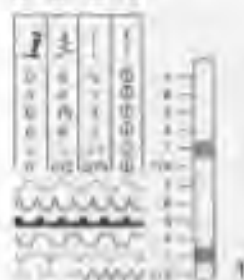
Sit right in front of the needle, i.e. in front of the working area.
Guide the work as shown in Fig. 1.

Thread cutter

To remove the work, raise the presser foot and check that the needle is raised. Wind from the handwheel. Take work out to the rear left and hook both threads into the cutter (Fig. 2).

The thread ends free themselves when you start sewing again.

A B C D



Selecting the stitches

Push the selector lever to the right to display and select desired stitch.

When the stitch is selected, the basic setting will be displayed at the same time.

e.g. Stitch No. 3 Blind stitch
 Presser foot No. 5 Blind stitch foot
 Stitch width: 3
 Stitch length: 2½
 Needle position: half right / right

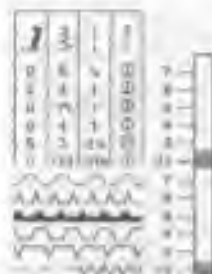
The stitch width and length should be adjusted to suit the type of work and fabric. The presser foot display recommends the appropriate foot for easy work and perfect results.

Fig. 1

A Knipper foot
 B Stitch width
 C Stitch length
 D Needle position

Fig. 2

E Stitch width / needle position
 F Buttonhole *
 G Stitch length (Normal stitch length is approx. 2½)
 H Feed dog



Straight stitch, Needle positions

Presser foot:	0
Thread:	according to fabric
Needle:	according to thread
Stitch:	
Stitch width:	0
Stitch length:	2 (or as desired)
Needle position:	centre
Feed dog:	sewing

The stitch length is adjusted to suit the fabric and the work.
Stitch length for most normal work is 2.

Reverse sewing

1. Pull the stitch length knob upwards above it and hold until reverse sewing is completed.

Five needle positions

2. The position of the stitch can be set to left and right in five positions with the needle position knob in 0. For blind stitching, edge stitching, sewing in zips.

For all normal sewing, the needle position is centre.



1

Zig-zag, Oversewing edges, Satin stitch

Presser foot	0
Thread	according to fabric
Needle	according to thread
Stitch	
Stitch width	5-8
Stitch length	1-3
Needle position	centre
Foot-dog	sewing

Setting zig-zag

The stitch width and length can be altered during sewing or when the machine is stopped. Needle must be out of the work when the machine is stopped.

Oversewing edges

- 1 Generally, the zig-zag should not be too wide or the stitch length too long. Start by cutting a neat edge. Guide the edge of the fabric to the centre of the foot so that the needle goes alternately into the fabric and then over the edge.

Satin stitch – close zig-zag

We recommend using the Embroidery foot No. 6 (additional accessory).

- 2 To set the stitch length, turn stitch length knob to the right until it locks (Fig. 2). By rotating H.A.L.F. to the left (mark at the bottom), the basic setting for satin stitch is obtained. Adjust the stitch density according to the fabric.



2



Sewing with the Overlock foot

1 Neckband with overlock seam

For all types of jersey

Presser foot	2
Stitch	7
Stitch width	4-5
Stitch length	1
Needle position	right
Feed dog	sewing

Fold the neatly cut neckband in half and press. Pin to the right side of the neckline, with the cut edges of the band exactly in line with the neckline edge.

When sewing, guide the edges to the path of the overlock foot.

2 Vari-overlock seam

Flexible overlock seam for all fine jersey fabrics, dresses, blouses, undersweat, nightwear etc.

Presser foot	2
Stitch	7
Stitch width	8
Stitch length	1
Needle position	right
Feed dog	sewing



Sewing in zips

Zip fastener inserted flat

Presser foot	4 *
Thread	sewing thread
Needle	90
Stitch	
Stitch width	0
Stitch length	approx. 2
Needle position	left, right
Feed dog	sewing

Slide the zip into position so that the teeth are covered by the fabric. Sew in the zip, starting each side at the bottom and sewing to the top, once with needle position right and once with needle position left.




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2

Blind hemming

Pressure foot	5
Thread	Sewing, darning thread
Needle	90-70
Stitch	
Stitch width	approx. 8
Stitch length	2.5
Foot position	not right/right
Feed dog	sewing

Sewing blind hems

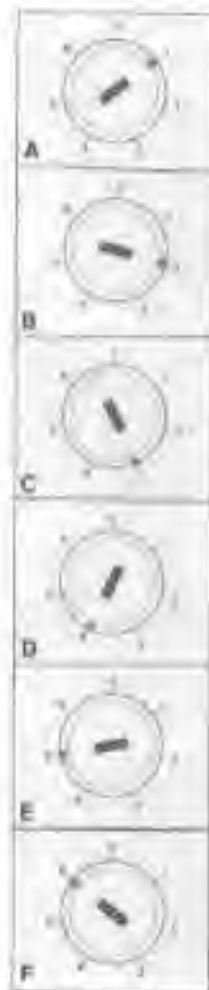
The hem should be prepared in the same way as for sewing by hand. Overstitch raw edges, fold and press.

Separating on the middle of the fabric, select needle position not right/right.

1

- 2 Position the hem under the foot as shown in Fig. 1. Sew slowly until the needle swings to the left. Using the handwheel, lower the needle until it is just about to enter the fabric, and check that it is only just cutting the fabric. If necessary, adjust the stitch width slightly – narrower if the needle is going in too far and a little wider if it is failing to catch sufficiently.

Always do a sewing test first!



Position 1
Machine sews the
first row of the buttonhole

Position 2
Machine sews a
second row of the
buttonhole

Position 3
Machine sews the
first leg

Position 4
Machine sews the
second row of the buttonhole

Position 5
Machine sews the
second leg

Position 6
Machine sews
sewing stitches



Sewing buttonholes

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Presser foot	7
Thread	Sewing/sewing thread
Needle	80-70
Stitch	
Stitch width	set automatically
Stitch length	approx. 1.5 (set automatically)
Needle position	set automatically
Feed dog	sewing

Sewing the buttonholes

- 1 When sewing buttonholes, thread the lower thread through the top of the button case.
- 2 Set stitch length: turn knob to the right until it locks. The mark will be at the top (Fig. 7). Stitch length is 0. By rotating half a turn to the left (back at the button), the basic stitch length setting for buttonholes is obtained. Set the stitch density according to the fabric: turn anti-clockwise for thinner fabrics, clockwise for finer fabrics.
ALWAYS! SEW A TRIAL BUTTONHOLE!
- 3 Lay the fabric under the foot so that the edge of the fabric lies in front of the presser foot. Lower the needle into the fabric, precisely at the start of the buttonhole. Lower the presser foot and sew the buttonhole in steps.
Cut buttonhole open as shown on Page 24.



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4

Buttonholes with gimp cord 1005

Gimp cord strengthens the buttonhole and is especially important when sewing any type of knitted fabric. The loop of the gimp will be at the end of the buttonhole where the button will pull.

- 1 Lay the fabric under the foot and lower the needle into the fabric precisely at the start of the buttonhole. Do not lower the foot yet.
- 2 When the gimp cord under the centre prong of the buttonhole, foot and take both prongs back under the foot. Sew the buttonhole. At position 2 (where a straight stitch), the cord comes away from the prong of the foot. Therefore, it is advisable to hold the loop of gimp down LIGHTLY with the finger.
- 3 Finally, pull the loop of gimp through. With knitted fabrics, thread the gimp cord through to the back with a coarse hand sewing needle and tie or sew it securely. In woven fabrics, the gimp ends can be simply cut off.

Cutting open the buttonhole

- 4 It is best to cut from each end of the buttonhole towards the centre to prevent cutting through a bias tack.



Sewing buttonholes

1004

Presser foot	19
Thread	sewing thread / darning thread
Needle	80-70
Stitch	
Stitch width	2 for beads 4 for bar tacks
Stitch length	approx. 1/4 (with effort)
Needle position	left
Feed dog	sewing

Sewing the buttonholes

- 1 When sewing buttonholes, thread the presser foot (press through) the finger of the button case.
- 2 Set stitch length. For method, see Page 73.
- 3 Select stitch width 2 and needle position (FT). Check if the needle is in the center of the presser foot. If not, turn the handwheel. Place the fabric under the presser foot and lower the needle so that it enters the fabric at the exact point where the buttoning begins (fabric edge should be in 3 mm of the presser foot). Sew the first bead, lower the needle into the center of the foot, raise the presser foot and turn the work. Lower the presser foot and sew the next. Adjust stitch width to 4 for sewing the bar tack. Hold the work and sew a few bar tack stitches. Raise the needle. Adjust stitch width back to 2 and sew the second bead. Raise the needle. Adjust stitch width to 4, hold the work and sew a few bar tack stitches. Adjust stitch width to 0 and sew a few securing stitches.
- 4 **Cutting the buttonhole open**
Using the beam / open, cut from each end of the buttonhole towards the center.



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Buttonhole with gimp cord

1004

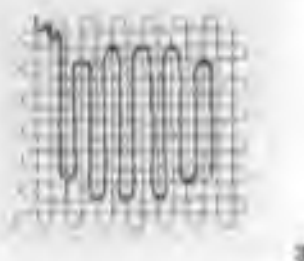
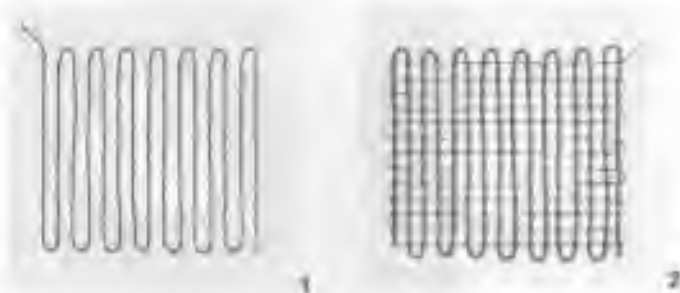
Gimp cord strengthens the buttonhole

Gimp cord is especially important for all knitted fabrics. The thickness of the cord depends on the fabric. Suitable cords are: Fiske yarn No. 5, thick hand sewing thread or fine crocheted cord.

Position the work under the presser foot as illustrated. The loop of the gimp should be at the end of the buttonhole where the button will pull.

Sewing with gimp cord

- 1 Using the handwheel, lower the needle to check if it is in the *Clay Ditch* of the presser foot. If not, turn the handwheel through one complete turn to raise the needle again. Push the fabric under the foot and lower the needle so that it enters the fabric at the exact point where the buttonhole begins. Do not lower the presser foot yet. Place the gimp to the left of the needle so that it lies in the left groove of the presser foot when the foot is lowered.
- 2 Sew the buttonhole. After sewing the first band, lower the needle into the left side of the presser foot. Raise the foot and turn the work so that the gimp lies round the needle. Lower the presser foot and continue as described.
- 3 When buttonhole is complete, pull the gimp loop through. With knitted fabrics, put the ends through to the wrong side with a coarse hand sewing needle and knits or sew to securely. In woven fabrics, the gimp ends can be simply cut off.



Darning

Project foot	9 *
Thread	Darning / machine embroidery thread
Needle	60-70
Stitch	
Stitch width	0
Stitch length	0
Needle position	centre
Feed-dog	lowered

Use the sewing table*. Whenever possible, use a darning bag. Lower the foot-dog. Always work from left to right, moving up and down over the hole. It is important to guide evenly when darning. Guide the foot as shown in Fig. 4.

Darning technique

Take three steps:

- 1 Work across hole then turn work through 90°
- 2 Work again from left to right then turn work through 180°
- 3 Fill in the darn, but only across the "hole". The stitches will be in the same direction so that they blend in with the second row.

* Additional accessory in some countries



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3

Darning with small darning ring

The small darning ring* is particularly practical for darning small torn, loose areas in fine fabrics and in fine underwear of all kinds, fine socks and pullovers.

Stretching the work

- 1 Fill the darning ring without the spring clip onto the free arm (Fig. 1). Push the darning ring as far out to the left as possible.
- 2 Place the index finger and thumb of the right hand on the darning ring to form a circle. With the left hand, stretch the fabric over the edge of the free arm. Hold the tensioned fabric with the thumb of the right hand.
- 3 With the left hand, fit the spring clip and press firmly into the darning ring.

Darning technique

Tornseams are usually stretched up and down and then side to side as it is not possible to fix in the work.



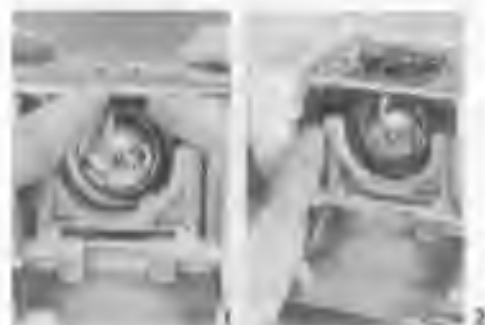
Changing the bulb

Disconnect machine from the mains by removing the mains plug from the socket

Sewing light 20W/15 Watt

Changing the bulb

- 1 Using the special bulb holder, press the bulb up, twist to the left and remove.
- 2 To insert new bulb, place the new bulb on the bulb holder and insert the bulb into the socket. Press upwards and twist to the right as far as it will go.



2



3



4

Maintenance: Cleaning and lubricating

If the machine is stored in a cold room, it should be brought to a warm room approximately one hour before use to restore the oil in the bearings to a fluid state.

Cleaning and lubricating the hook

- Set the power switch to 
- Check that the needle is raised.
- Remove presser foot and needle.
- Open the hinged front cover on the free arm.
- Lower the feed-dog by turning knob to symbol .
- 1 - Using both thumbs, press the stitch plate up and back.
- Take out the bobbin case.
- 2 - With the thumb of the left hand, press the lower release lever to the left. Fold down the semi-spherical locking strap with the black hook race cover.
- Take out the hook.
- Clean the top and bottom of the hook race with the cleaning brush and cotton cloth.
- 3 - Lightly oil the hook race with 1-2 drops of oil.
- 4 - Insert the hook. If necessary, turn the handwheel with the hook driver to the left.
- Close the black hook race cover and locking strap. The pawl must engage.
- Insert the bobbin case.
- To left the stitch plate: insert the stitch plate from the rear, push forward until it engages.
- Close the hinged cover on the free arm.
- Raise the feed-dog by turning knob to symbol .

Fault prevention

If the sewing machine does not sew properly, it is usually due to incorrect use.

Check whether:

- The upper and lower threads are correctly threaded.
- The needle has been correctly inserted with the flat side of the shank to the rear.
- The needle size is correct. See needle and thread table.
- The machine is clean. Brush away any thread remnants.
- The bobbin case is clean and lubricated.
- Any remnants of thread are trapped between the thread tension disc, and beneath the bobbin case spring.

Upper thread breaks

- The upper thread tension is too tight.
- Poor quality needles. Ideally, needles should be purchased from a BERNINA dealer.
- The needle has been incorrectly inserted. The flat side of the shank must be to the rear.
- The needle is blunt or bent.
- Poor quality thread, knotted or direct-cut thread.
- Stitch plate or hook tip damaged. Take to a BERNINA dealer.

Lower thread breaks

- The lower thread tension is too tight.
- The bobbin is jamming in the bobbin case. Replace bobbin.
- The hole in the stitch plate has been damaged by the needle. This must be repaired by an expert.
- The needle is blunt or bent.

Needle breaks


- Needle clamp screw not sufficiently tightened.
- Fabric withdrawn forwards instead of backwards under the presser foot.

- When sewing over a thick area, the fabric was pushed while needle still in the fabric. Use a jeans foot.
- Poor quality thread, unevenly wound or knotted.

Skipped stitches

- Wrong needle: Use only 130/705 in needle system.
- The needle is blunt, bent or incorrectly inserted. Turn right to the job when inserting.
- Poor quality, badly polished needle.
- The needle point does not suit the fabric being sewn. If necessary, use ball point for knitted fabrics and cutting point for leather.

Machine fails to run

- Plug is not inserted properly.
- Power switch is  position.
- Machine jammed up by use of unsuitable oil. Machine will have to be cleaned by a BERNINA dealer.
- Machine has been standing in a cold room.

Faults in seams

- Remnants of thread between the thread tension discs.
- Remnants of thread under the bobbin case spring.
- Threaded ends lock down.
- Incorrectly threaded. Check lower and upper threads.

Important

If you have to take your machine to a BERNINA dealer, please always take the foot control unit and accessories.

The right to make (constructional) changes differing from text and illustrations is reserved.

Important!

Safety instructions:

SEV VDE (Official Testing Authorities in Switzerland and VDE Germany): The following safety instructions must be observed:

- The training device is a source of danger (risk of cuts to the fingers). Therefore, always watch your work.

- The sewing machine should be disconnected from the mains by removing the mains plug from the socket when carrying out any operations within the needle movement area, i.e. changing the needle, presser foot, presser plate, bob or when removing or replacing the lower thread bobbin or hook or when carrying out maintenance (cleaning and lubricating) and whenever work is interrupted or interrupted.

- Electrical repairs should only be carried out by a qualified person.